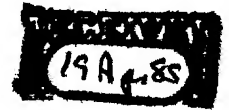


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Final Report

December 1984

PERSONNEL IDENTIFICATION AND SELECTION (U)

By: DAVID SAUNDERS EDWIN C. MAY
SRI CONSULTANT SRI INTERNATIONAL

Prepared for:

DEPARTMENT OF THE ARMY
USAINSCOM
FORT GEORGE G. MEADE, MARYLAND 20755
Attention: LT. COL. BRIAN BUZBY

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*Final Report
Covering the Period 15 November 1983 to 15 December 1984*

December 1984

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ESU 83-134

SRI Project 6600

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I OBJECTIVE (U)

(U) The objective of this effort was to determine if a technique for testing personality could be developed that, when applied to a general population, would delineate specific personality types that exhibit a high degree of talent for remote viewing (RV).

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II INTRODUCTION (U)

(U) Traditionally, self-report inventories have been primarily used to assess personality; i.e., carefully designed questions that ask the individuals to describe their own personality. Although this technique has met with modest success, its application to the search for personality correlates with psychoenergetic functioning has, for the most part, failed.

(U) The reasons for this failure are complex. First, it is necessary in any correlational study to have reasonably quantitative measures of the variables that are being correlated. The self-report measures have been inadequate and, until now,^{1*} sufficiently precise measures of psychoenergetic functioning have been absent. Secondly, the assessment of personality has been, and still remains, a very difficult problem. This report describes techniques that have provided some progress in personality assessment (using self-report inventories as well as performance measures) for correlation with RV.

*(U) References are listed at the end of this report.

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III BACKGROUND (U)

(U) Self-report personality inventories provide the most commonly used measurement approach in psychological practice, not because inventories have proven able to deal with every situation, but because they are convenient to administer and often provide a reasonable "return on investment," the latter being measured in terms of subject time plus cost of administration and scoring. A wide variety of inventories are on the market, most of which are more or less tailored for specific applications. Among the general-purpose inventories, the Eysenck Personality Inventory, the 16PF Questionnaire, and the Myers-Briggs Type Indicator (MBTI) have previously been used in psychoenergetic studies, but with only modest success.

(U) The assessment of personality through performance measurement is relatively less common in psychological practice; the relevant techniques are frequently not even taught, are relatively time-consuming at best, and are viewed with skepticism by many practitioners. In this connection, although there is certainly room to improve the prevailing interpretive methodologies, there is substantial evidence that performance assessment of individuals often elicits important information about their personality that may be otherwise difficult to obtain.

(U) Two personality measurement approaches not systematically employed in this study are "behavior ratings" and "indirect assessment." Ratings are often very easy to obtain, but they are very difficult to objectify (i.e., to eliminate the effect of interjudge differences) and are rarely able to achieve fine distinctions. "Indirect assessment" refers to the possibility of inferring personality from the work-products of target individuals, such as their paintings or speeches or decisions; in connection with RV, this is still a strictly theoretical possibility.

(U) Our decision to study both self-report and performance measures of personality, each having potential advantages and disadvantages, may ultimately lead to a two-stage screening process: a first stage employing self-report techniques and seeking simply to identify promising candidates for second-stage screening; and a second stage employing the more labor-intensive performance measurement methodology but aiming to isolate promising candidates for serious training.

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IV METHOD OF APPROACH (U)

A. (U) Overview

(U) To accomplish the object of this effort, we used a group of 19 "calibrated" remote viewers as "baseline" indications of personality types for individuals who are likely to be good remote viewers. All 19 viewers were scored on a self-report inventory and on a performance measure. (Details of both are described below.) Item analysis was conducted to determine if there were any above-chance groupings of individuals in accordance with their RV abilities. By comparing the results of the performance measures with those of the self-report inventories, we considered the possibility of correlations between the two techniques.

(S/NF/CL-3) The next stage was to administer the same tests to all SRI, Army INSCOM, and Mobius Society personnel currently involved in RV. On the basis of the test results, predictions were made as to the individuals' RV abilities.

(U) As a test of correlations between self-report inventories and RV abilities in the "general" population, we conducted item analysis upon 3081 responses collected by the Mobius Society.

(U) To determine if Neurolinguistic Programming (NLP) could assist in the search for personality correlates to RV, we asked Dr. Nevin Lantz to provide us with a detailed analysis with particular focus upon applications for psychoenergetic research.

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B. (U) Personality Assessment Instruments

1.0 (U) Personality Assessment System

(U) The particular performance measurement implementation chosen was the "Personality Assessment System" (PAS). The PAS is a comprehensive interpretive framework for profiles of subtest performances that have been generated by the Wechsler Adult Intelligence Scale (WAIS). The PAS has been described in considerable detail elsewhere² and will only be outlined here.

(U) The model on which the PAS is based defines three levels of personality that can be considered as concentric spheres. The innermost is called the primitive level in that, from birth onward, this level is responsible for determining how and to what a person responds. The next layer (called the basic level) is achieved by the time a child matures to adolescence. Finally, the outermost layer (called the contact or surface level) is recognizable in adulthood.

(U) The primitive or primary level includes three fundamental components. These dimensions, which represent the primitive personality structure, are labeled externalized-internalized (E-I), regulated-flexible (R-F), and role adaptive-role uniform (A-U). Each of these represents a continuum, but for clarity we will outline the polar opposites for each dimension.

(U) The natural frame of reference for the externalizer (E) lies in the world outside himself. Externalizers are perceptually dominant, environmentally sensitive, and more responsive to external than to internal cues. They are behaviorally active and more interested in interacting than in thinking. Their perception is relatively specific and concrete, and their emotionality is directed outward. Internalizers (I), on the other hand, are ideationally dominant, self-sufficient, and more responsive to internal than to external cues. Internalizers are behaviorally passive, tend to withdraw, and are more inclined toward thinking than doing. They perceive in abstract terms, and emotionality is directed inward.

(U) Regulated and flexible people represent the two poles of the R-F dimension. Regulated persons (R) react to a limited number of specific, well-defined stimuli on which they can concentrate and focus. The range of their reactivity is narrow, and because their threshold for confusion and distraction is high, they are characterized by their ability to

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concentrate. Flexible persons (F) have a wide range of reactivity. They tend to be aware, almost simultaneously, of a wide variety of stimuli. As a result, they have difficulty concentrating and their threshold for confusion is low. They are characterized by sensitivity, empathy, and insight.

(U) The role adaptive–role uniform dimension is particularly difficult to explain. Briefly stated, the ability to shift roles easily is a talent of the primitive A, but other components of the personality may influence role flexibility as well. A primitive U, at the other polar extreme of the A–U dimension, experiences special problems as he attempts to respond or react to social cues. Although the social response style of the A child may mask, obscure, and even inhibit development in the other dimensions of personality, the response style of the U child tends to accentuate or even facilitate such development. (Much of the above descriptions were paraphrased from Winne and Gittinger².)

(U) The PAS is itself under development. Therefore, in this project we will make primary use of an as–yet–unpublished series of PAS “reference groups.” These reference groups provide a simplified PAS in the sense that “only” 80 distinct profile classes are initially recognized (compared to a possible 4096 in the full PAS). These classes can be given meaningful names and may be associated with useful descriptions. Appendix A gives the names that are currently being associated with each of the reference groups. At the writing of this report only 40 reference groups have tentative narratives. Most individuals can be clearly assigned, on the basis of overall profile similarity, to a single group. Some individuals, however, prove difficult to assign to any class and some are almost equally capable of assignment to two different classes. In the latter situation, both descriptions tend to apply. It is to be understood that significant individual differences must still exist within each of these 80 reference groups and that some of this intragroup variance may be superficially very obvious. The members of a given group are seen as facing very similar problems of adjustment, but they may “solve” these problems in dramatically different ways ranging, for example, all the way from “denial” to “exploitation” of the same underlying characteristics.

2. (U) The Myers–Briggs Type Indicator

(U) The MBTI³ was chosen as the self–report instrument because it is widely used, well understood, and one of us (Saunders) has been a major contributor to its modern

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development. Like most self-report instruments, it consists of a large number of questions that may be answered without time limit. The current form (Form J) was developed, in part, by Saunders, and includes questions to optimize its overlap with the PAS. By using the MBTI, it was hoped that, because of the overlap potential with the PAS, it might be used as a "mass" prescreening for the PAS.

3. (U) The Mobius Society Questionnaire

(U) The Mobius Society is a nonprofit organization in Los Angeles, California, committed to research into and applications of psychoenergetic functioning. A recent effort by Mobius involved a mass RV experiment and self-report inventory (called "PSI-Q2") was published in *OMNI* magazine⁴ which eventually yielded 3308 usable responses. The questionnaire itself included 48 self-report items, each to be answered on a 5-point scale. These items were chosen to form 12 4-item scales; in combination with the 5-point response format, the scales were expected to yield 17-point ranges of possible scores--enough to provide some individuality of profiles, and certainly enough to permit correlational analyses unhampered by scale unreliability. 227 of the respondents to this questionnaire actually responded to a Japanese translation and will not be used here.

C. (U) Baseline Data Acquisition

(U) The possibility of applying the PAS to determine the ability/personality patterns of skilled RVers did not originate with this study, and we were able to begin with a file search. To begin, SRI files yielded 6 WAIS profiles that had been gathered in 1974 from the successful viewers of a prior study⁵; three of these viewers (002, 414, 504) have subsequently performed with enough consistency to be regarded as "stars." A search of our own files has now yielded five additional profiles of potential interest--persons who had spontaneously reported psi phenomena such as precognitive dreams. In addition, we were able to administer the PAS to eight other persons with demonstrated psi skills--two at SRI (one of these a "star") and six through cooperation of the Mobius Society.

(U) An important change in the PAS since 1974 has been the addition of two new subtests that are referred to as the "PAS Fourth Dimension" and administered at the end of the Wechsler battery⁶. These two subtests, color naming (CN) and time estimation (TE), contribute important data to the Reference Group assignment algorithms, and each can be

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conceptualized as directly relevant to the remote viewing task. Specifically, color naming, which is an individually administrable version of the Stroop task, is thought to invoke interhemispheric conflicts of brain function by requiring the left brain to report what the right brain has seen, rather than what the left brain has seen for itself. Tasks similar to the time estimation subtest have already been shown to elicit unusual behavior from known psychics.⁷ Obviously, the fourth dimension has been included with all the newly administered PAS. In addition, we have been able to acquire these data for three of the six earlier SRI cases, including two of the three stars.

D. (U) Confirmation Data Acquisition

(U) Two experiments were undertaken at SRI for the purpose of comparing the relative effectiveness of certain variations of psi training procedures⁸⁻⁹. The viewers (a total of 8) in both training experiments were volunteers aware of these general purposes, but initially inexperienced and totally naive as to possible training/learning strategies. The PAS, including its fourth dimension, was administered to each of these viewers, who also completed Form J of the MBTI. None of the results of the PAS testing were available to either the subjects or the trainers before the tabulation of these results.

E. (U) "General" Population Survey

(U) We used the PSI-Q2 experiment of the Mobius Society as an initial test of personality correlates with the "general" population. Since the readers of *OMNI* magazine must be considered a selected population, the extension of the personality concepts to the 3308 respondents is "general" only in that it composes such a large sample. We conducted item analysis upon this sample to determine if there were any correlations either with our baseline data or with the data of the 16 trainees.

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V RESULTS AND DISCUSSION (U)

A. (U) Baseline Results

(U) Table 1 distributes all 19 of the currently available "precalibrated viewers" according to their primary PAS Reference Group assignments. The notation that will be used for PAS Reference Groups throughout this report involves three letters to indicate the extreme measures for the three components of the primitive personality level. The numbers 0 through 9 further delineate the reference group accounting for both the basic level and the 4th Dimension addition. As an example, an ERU8 individual tends to be an externalizer, regulated, and role uniform. A Level 8 is described as follows:

To a first approximation, Level 8 patterns are high on everything (except Primitive indicators). Being not driven by weaknesses in their own personality, these people often have difficulty figuring out "who they are" and why other people are so sure of themselves. Their search for understanding may be either empirical or theoretical. Their preferred problem-solving style is contingency planning, i.e., they generate many more solutions than they implement. (Saunders, unpublished)

(U) In Table 1 the eight SRI viewers are designated by three digit viewer numbers; four viewers who are considered as extremely accomplished are underlined in the table. The Mobius viewers are designated as M01 through M09, and the remaining cases are shown as "???". Even without the formality of a statistical significance test, the pattern of results is suggestive. For example, 14 of the 19 cases are actually assigned to the RU groups, which account for only 1/4th of the possible groups. For example, all four of the accomplished viewers are assigned to groups that include other members.

(U) While Table 1 provides a descriptive summary of the available PAS data for precalibrated viewers, this display does not lend itself to an efficient significance test. In order to generate a test statistic that is sensitive to the sort of clustering we see in Table 1, we consider the "distances" between pairs of cases that result when the scores of each case

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Table 1

(U) PAS REFERENCE GROUPS OF PRECALIBRATED VIEWERS

Ref. Group	I.D.	Ref. Group	I.D.
ERA0 IRA0 IFA0 EFA0 EFU0 IFU0 IRU0 ERU0	MO7 MO6	ERA5 IRA5 IFA5 EFA5 EFU5 IFU5 IRU5 ERU5	
ERA1 IRA1 IFA1 EFA1 EFU1 IFU1 IRU1 ERU1		ERA6 IRA6 IFA6 EFA6 EFU6 IFU6 IRU6 ERU6	<u>009</u> 446
ERA2 IRA2 IFA2 EFA2 EFU2 IFU2 IRU2 ERU2	<u>002</u> MO2 MO5 ???	ERA7 IRA7 IFA7 EFA7 EFU7 IFU7 IRU7 ERU7	???
ERA3 IRA3 IFA3 EFA3 EFU3 IFU3 IRU3 ERU3	986 <u>414</u> MO4 ???	ERA8 IRA8 IFA8 EFA8 EFU8 IFU8 IRU8 ERU8	<u>504</u> 688 807 MO9 ???
ERA4 IRA4 IFA4 EFA4 EFU4 IFU4 IRU4 ERU4	 ???	ERA9 IRA9 IFA9 EFA9 EFU9 IFU9 IRU9 ERU9	

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are used as coordinates to plot a "point" in a "PAS-space". In particular, suppose we locate and tag the 14 best viewers within the larger collection of 3167 cases used to define the Reference Groups. Suppose we then count, for each tagged viewer, the number of nonviewers that are closer to it than any other viewer; this will result in 14 distinct counts, one starting from each viewer. If we arrange these counts in a rank order, from smallest to largest, the expected value of the j th count is given by

$$\text{Expected value of the } j^{\text{th}} \text{ count} = \frac{2j(N - n)}{n \times (n + 1)}$$

where N is the total number of nonviewers (3153) and n is the number of viewers (14). For the present data, the expected value is $30.02 \times j$. The actual counts resulting from this analysis are shown in Table 2, in the column labeled "Number Between." The 14 viewers are shown in "clusters" based on the calculated distances, which also "happens" to sort them by reference groups. Half of the observed counts are below the expected minimum, while all are below the expected mean ($p \leq 0.00006$).

(U) In view of the test summarized in Table 2, the PAS data gathered from the precalibrated viewers demonstrate that the good viewers are bunched together, though not necessarily all in the same bunch. Indeed, even the generalized distance measures underlying Table 2 point to the existence of at least four prototypical good viewers, with one recognized star performer included in each of these four types. Viewers M07 and 986 (of those reported in Table 2) seem most likely to represent possible fifth and even sixth prototypical good viewers.

(U) On the basis of Tables 1 and 2, the strongest case for the importance of a particular PAS pattern or Reference Group focuses on ERU8. The meaning of ERU8 is given by the following narrative description:

ERU8: Seeker—Intense, alert individuals who are likely to be seriously in conflict about the meaning of life. As they look around, ERU8 persons see people enjoying life and achieving satisfactions that do not come to them even when they do the "same" things. In particular, they are prone to envy the intense sensual experiences of the EFA and the fantasy life of the IFA, for which they have no counterparts. At least partly to deal with this problem, they may develop unusual interest in psychology, and readily volunteer for studies of drug effects and other esoterica. Also, as part of their search for "real" experience, they are likely to explore homosexuality. All the while, they can be reasonably productive in a conventional role. ERU8 persons may

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appear "laid back," but their perceptivity is really vigilance; they are looking for something, and they can become surprisingly active when they suspect that they have found it.

Table 2

(U) CLUSTER ANALYSIS OF 14 PRECALIBRATED VIEWERS

Viewer	Nearest Viewer	Number Between	Reference Group
688	504	2	ERU8
504	688	3	ERU8
807	688	4	ERU8/ERU5
M09	807	469	ERU8/IRU7
M07	M09	153	IRA0
986	M09	959	IRA3
M06	446	10	ERU5
446	M06	39	ERU6
009	M06	17	ERU6
M02	002	13	IRU2
002	M02	25	IRU2
M05	002	382	IRU2/ERU2
M04	414	413	IFU3
414	M04	796	IFU3
Maximum		3153	
Expected Mean		1577	
Expected Minimum		30	

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(U) Normatively, ERU8 is not a common reference group. It is overrepresented in our database because we have had access to numerous samples of volunteer subjects for psychological experiments. The reference group parameters for ERU8 currently depend on a sample of 98 known exemplars, which implies appreciably better-than-average clarity of group definition.

(U) A review of the specific ERU8 viewers known to us confirms that they did not spontaneously volunteer themselves as good, or even potentially good remote viewers. All these people have other professional identities, and pursue psi as no more than an avocation. Viewer 504, now considered a star, actually came into the program as a control subject.

(U) The second major pattern evident in both Tables 1 and 2 is Reference Group IRU2. The meaning of IRU2 is given by the following narrative description:

IRU2: Mystic--For Level 2 persons, the meaning of life is that it is to be experienced. For IRU2 persons this is an essentially internal process; they are predisposed to the possibility of mystical communion and communication and find deep symbolic significance even in ordinary events. Media, art, and music hold special interest. Because they think nonverbally, it is difficult for them to share or explain their experiences; they are generally willing to try, but often come across as merely hallucinating. In relation to the "real world," they are a reactive problem-solver and an underachiever. They have a strong conscience, seek to earn their keep, but usually gravitate to some rote manual or clerical activity that demands neither social finesse nor symbolic manipulation. Their need for guidance and supervision may become either an asset or a liability.

(U) Normatively, we see no reason to believe that IRU2 is either especially common or especially rare. Because IRU2 persons are quickly perceived as "a little odd," they are likely to be passed over by testers looking to fill quota samples for standardization studies, but they are not really averse to being tested. The reference group parameters for IRU2 currently depend on a sample of 53 known exemplars, resulting in average clarity of group definition.

(U) From a psychoenergetic perspective, the IRU2 group distinguishes itself by pursuing psi with a true sense of vocation. Reviewing the four IRU2 cases, all these persons have become known through their own initiative, and all have sought to capitalize professionally on this perspective. Three of the four have published books in the field, another is registered as a psychic at the local chamber of commerce, and one serves as a training monitor. We are

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not yet prepared to say whether an ERU8 or an IRU2 is a better viewer, but it is clear that an IRU2 benefits more from the courage of his convictions.

(U) Another difference between IRU2 and ERU8 manifests itself in a training environment. Persons having both these patterns are basic level internalizers to the PAS, but they have developed quite differently. IRU2 persons are also a primitive level internalizer, so that their basic i-orientation is relatively relaxed and spontaneous. ERU8 is a primitive externalizer whose basic i-orientation is learned and requires unconscious effort to be maintained. We expect ERU8 to have relative difficulty avoiding the pitfalls of analytical overlay (AOL) while remote viewing. In a very real sense, the everyday successes of the ERU8 depend on maintaining AOL continually, and it is fundamentally threatening for ERU8 to abandon it. Moreover, when it is abandoned, the individual reverts to a basic e-orientation that appears to be less conducive to psychoenergetic functioning. We predict that ERU8 persons will have more difficulty than IRU2 in learning RV, and that for this reason they will be less likely to discover this skill on their own. On the other hand, although AOL may be an impediment to successful RV, the typical psychokinesis (PK) experiment seems unlikely to be influenced one way or the other by it. Indeed, if there is any motivational component to successful PK, we suspect that an ERU8 might demonstrate his skill in this realm relatively more quickly than an IRU2.

(U) As an aside, we note that two of our IRU2 exemplars (M02 and 002) were among the five individuals studied by Schmeidler with Eysenck's "Chained Reproduction" procedure for time estimation.⁷ The PAS time estimation task is similar but not the same and involves seven independently timed production trials with target times of 20, 5, 10, 30, 10, 5, and 20 seconds, respectively. Factor analysis of data from the latter task, treating each trial as a separate entity, clearly suggests three factors at work. The major influence is the overall bias toward over- or under-production, and this is the score currently reported as part of the PAS. The second influence is a trend across the seven trials toward relatively longer or shorter successive productions. Our psi subjects, and especially our IRU2 psi subjects, have uniformly tended, as the task became familiar, toward equating more and more clock time with the same subjective time. We see this as equivalent to Schmeidler's result. (The third influence evident from the factor analysis is a trend across size of time interval that renders the conversion between subjective and objective time more or less nonlinear.)

(U) Primarily for the record, we include our ERU6 and IFU3 precalibrated viewers. There are clear statistical portents of significant patterns beyond ERU8 and IRU2, but we

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have not yet seen enough exemplars to warrant specific discussion. Certainly, it is important to continue the process of gathering PAS data from known viewers in the expectation that further exemplars will be recognized. The meaning of ERU6 and IFU3 are given by the following narrative descriptions:

ERU6: Manager--Proactive problem solvers who are forthright in their dedication to constituted authority and decisively rational in their views, but who tend to be overcommitted to their work and tend to overcontrol their own feelings and emotions. They are extremely competitive and ambitious and seek to inspire and involve others through example. Their social behavior often demonstrates a concern to show that they cannot be manipulated by others. They are better at creating procedures than policies, but nevertheless see themselves as intellectually creative and expect to be appropriately rewarded for these efforts on behalf of their organization. Members of this group are found in the middle echelons of any major organization, such as a bank, business, hospital, or government agency.

IFU3: Votary--Polyactive problem-solvers who are prone to be autistically self-centered, who recognize and feel guilt about this, and who combat the implied threat by immersing themselves in a multitude of worthy activities. As children they were permitted to pursue their considerable intellectual curiosity, without the imposition of either mental discipline or social conformity. As an adult, they remain intellectual and creative, and attach much importance to their own and others' right to be "different." They have a strong conscience and are likely to be politically "liberal" and to have well-developed aesthetic judgment. Their vocational interests are likely to be in the humanities and social science, rather than in mathematics or physical science. They may function well as teachers, administrators, consultants, or team-members.

B. (U) Training Results

(S/NF/CL-3) As reported earlier, two training groups at SRI and one at INSCOM served as the confirmation cases. The PAS, including its Fourth Dimension, and Form J of the MBTI were administered to each of the trainees. None of the results of the PAS testing were available to either the trainees or the trainers before the tabulation of the results.

(U) The bunching of the precalibrated viewers in PAS-space, shown in Table 1, suggests that outstanding psi ability is not a widespread trait. ERU8 and IRU2 together may represent as much as 2 percent of the general population and, allowing for a few other PAS patterns still to emerge, our ultimate interest is estimated to be limited to no more than 5 to

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10 percent of the population. We must expect that most of the trainees in an unscreened sample will have little psi aptitude.

(U) The results of the SRI training efforts and the personality measures are shown in Table 3. Two measures of RV performance are shown. The RV-Figure-of-Merit column displays an overall level of RV ability. (Because different target sets were used for the two training efforts, the Figures of Merit are valid as relative measures within a training group only.) The RV-Learning column displays a statistical assessment (student's t-test) of the slope of a line drawn through the session-by-session Figure of Merit data. Although there are other possible RV measures that could be considered, these two represent the current state of the art.

Table 3

(U) RESULTS OF SRI RV TRAINEES

Viewer	PAS	MBTI	RV Learning	RV Figure of Merit
807*	ERU8	ISFJ	2.06	0.227
249	IRU7	ISTJ	1.43	0.239
997	IFA1	ESFP	0.70	0.194
454	IFU4	ENFP	0.52	0.199
309 †	IRA5	INXP	1.72	0.353
558	IFA8	XNFX	1.40	0.372
694	ERA2	IXXP	0.91	0.387

* Track II SRI training group.

† Track I SRI training group.

Note: The figure of merits are only valid within a training group.

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(S/NF/CL-3) Table 4 shows the results for the INSCOM trainees. The RV-Ability-Estimate column represents the best qualitative assessment RV abilities of the trainees. A "***" represents a "star viewer", while a "***" represents an extremely good viewer. "+" represents "good" or "OK" viewers and "?" represents viewers who are

(S/NF/CL-3)

currently unevaluated. These measures are very subjective; for example, the difference between "***" and "**" is somewhat arbitrary.

Table 4

(S/NF/CL-3) RESULTS OF THE INSCOM RV TRAINEES

Viewer	PAS	MBTI	RV Ability Estimate
372	ERA6	INTJ	**
063	ERA6	INFP	*
016	ERA8	ENTP	+
099	IRU4	INTJ	+
043	IFA5	INFP	+
018	IRU7	XNXP	+
035	IFU5	INTP	?
101	IFA6	ESTJ	?

Note: The RV Ability Estimate is qualitative.

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(U) When we compare all 15 of the training subjects with all four of the potentially interesting reference groups identified above, there is only one trainee who can be properly regarded as a member of any currently interesting group—Viewer 807. Because of this, much depends on how we perceive the training results for Viewer 807. Actually, among the seven trainees with quantitative data, Viewer 807 ranks as best on three of the six RV measures and ranks as second-best on two more of them (only two measures are shown in Table 3. Puthoff and May⁸ and Humphrey⁹ contain complete details.) The significant positive slope for Viewer 807's Figure-of-Merit is what we might expect from an ERU8 personality. We have stated earlier that ERU8 personality should expect to experience at least initial difficulty with overcoming AOL.

(U) The only other trainee in Table 3 with consistently positive RV measures is Viewer 249. There is simply no way to regard this person as a member of any of the four groups

(U)

already identified. Either we may regard these training data as a fluke, or we may regard them as suggesting that IRU7 is a fifth group for which to watch. The latter possibility is somewhat reinforced by the presence of another IRU7 in Table 1.

(S/NF/CL-3) Perhaps the most important observation to make about the results of the INSCOM group (Table 4) is that they represent the results of a selection process very different from the "process" implicit in Table 1. We need be neither surprised nor discomfited by the apparent absence of any IRU2, ERU8, ERU6, or IFU3 cases. For one thing, except for ERU6, we suspect that good examples of these groups simply were not available in the pool from which the selection began. (Part of this may be because IRU2 and ERU8 personalities, on average, might have difficulty with security clearances.) Also, we observed earlier that our known IRU2 viewers initially made themselves known, and our known ERU8 viewers responded to calls for volunteers explicitly for psychoenergetic research. By contrast, the viewers in Table 4 were much more deliberately recruited; they are all "volunteers" in the sense of "informed consent," but the request for this consent was only the final step in a multistage process of testing and interviewing.

(U) We regard the confirmatory signs in Table 4 as encouraging. For example, although we find no actual IRU2, we note that our IRU2 training monitor regards his IRU4 student as "having the most long-term potential" despite his also being the "most difficult to work with." Apart from the irony in this, IRU4 is theoretically just an IRU2 with a successful PAS contact pattern built on the surface. As another example, although we find no single unmistakable ERU8, we see four of these eight cases falling within three standard deviations of the ERU8 centroid according to ERU8 norms.

(U) Although we have yet to see a bona fide star viewer in the IRU7 reference group, Table 4 provides at least one (018) and possibly a second (043, a borderline IRU7) example with affirmative precalibration, reinforcing the context already developed earlier (??? and 249).

(U) Reasonable arguments can be made that self-generated interest in psi flows from Primitive U (17 of 19 cases in Table 1 are Primitive U) and that selection by interview will tend to favor Primitive A (five of eight cases in Table 4 are Primitive A). On the other hand, it is not obvious that A-U differences should affect psi performance. (We think it is obvious that E-I and R-F differences should affect psi performance.) If we set aside the A-U differences on grounds they may be artifactual and then reexamine Table 4, we now

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(U)

have three of the eight cases falling into "known" psi-positive categories. Two of these (063 and 372) are ERA6, now grouped with ERU6; the same two already have the strongest track records represented in Table 4. The third one (016) is ERA8, now grouped with ERU8; he is still a trainee, but is seen as "making the fastest progress" of anyone in his training group.

(S/NF/CL-3) Without identifying any new categories, it is possible to relate six of the eight INSCOM viewers to the previous data. Viewers 101 and 035, who are unambiguously Primitive F, are left over after this process. We have seen very few F personalities in the whole course of this project, and would be ready to write it off but for Viewer 414 shown in Table 1. Several of the viewers have spontaneously suggested that the PAS task that defines this primitive dimension (the WAIS Block Designs) seemed to them especially relevant. Theoretically, we see this dimension as defining an individual's signal-to-noise requirements: R persons work with a relatively high threshold, and can count on the "reality" of perceptions that pass through their filter. The problem for them is to make up for what does not pass. F persons operate with a lower threshold requirement and can count on not missing much that's real, but they also perceive a lot of noise as though it too were real. Thus, an R person is typically better motivated than an F person to learn how to perceive more with higher accuracy regardless of the use of psi abilities.

(U) Only two of the individuals in Table 4 (035 and 018) display the trend within the time estimation task thought to be a hall-mark of psychic performance. In view of the much larger effect previously observed in IRU2 as compared with ERU8, the present observation may mean nothing at all. On the other hand, it may relate to the need/use of technical aids to initiate psi conducive attitudes, particularly for Level 6 viewers. More than any other groups, Level 6 individuals are accustomed to making time work for them, and their time estimates tend to be among the most accurate.

(U) The self-report data in Table 4 illustrate the point that the PAS versus MBTI correlation is complex. Two INTJ persons have very different PAS patterns; likewise, so do two INFP persons. It is difficult to imagine that these eight viewers have, in fact, been selected partly on the MBTI; the only clear trend in the data is toward intuition, but intuition is common at high normal levels regardless of WAIS patterning. A self-report analysis employing a finer breakdown, perhaps along the lines of PSI-Q2 (see below), seems likely to be necessary if the goal of mass screening is to be attained. MBTI Form J, the form used thus far, contains enough items to support such a finer breakdown.

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(S/NF/CL-3) The emergence of ERA6 as a potentially psi-positive reference group is an especially encouraging event. Of all the groups we have had reason to mention, this one is normatively the most common, by far, and is especially common in military-type organizations, in which ERA6 individuals function well and comfortably as the middlemen in a chain of command. They are more loyal to individuals than to abstract ideas and are capable of insulating themselves from philosophical and ethical questions. In terms of psi, therefore, they appear to be willing, able, and relatively likely to stick with it. A problem for selection, however, is that ERA6 ranges over several MBTI types, reducing the potential efficiency of first-stage screening. The meaning of ERA6 is given by the following narrative description:

ERA6: Role-Player--These persons are proactive problem-solvers who are naturally both involving (A) and involved (E). As an adult, ERA6 persons have presumably found a socially functional role that requires them to be active and apparently relating but depends upon a minimum of true involvement. In effect, ERA6 persons spend life "proving" that they cannot be tempted. The tension that this implies is relatively repressable because of the R, but somatic symptoms may develop over time. Members of this group are relatively common and have included actors, dancers, musicians, waiters, salesmen, policemen, teachers, and managers.

(U) On balance, our efforts to cross-validate the important PAS patterns have yielded only partial results. There is nothing strongly inconsistent with expectations, but the results are not statistically conclusive primarily because of the low proportion of psi-talent estimated to exist in unselected populations. Future efforts to achieve cross-validation should be planned so that approximately 50 percent of the experimental trainees are expected to show strong learning curves. This will require excluding about 80 percent of an unscreened population.

C. (U) Preliminary Identification of Promising PSI-Q2 Patterns

(U) We report the initial exploratory results of psi in relation to self-report personality measures.

(U) The first level of RV analysis on the PSI-Q2 data involves a simple one-in-six "guessing" task. Viewers were asked to pick which of six target categories best matched their response. No significant evidence of psychoenergetic functioning was found. However, a "forced choice" task is shown throughout the literature as an ineffective way of eliciting good

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responses, and thus we require a more sensitive RV measure before we can verify some of the earlier findings.

(U) With regard to personality questions, we already know that reasonably clear-cut correspondences may exist between psi-criteria and PAS information. We also know¹⁰ that the correspondences between the PAS and the MBTI are relatively complex; they can be described as many-to-one mappings of complete patterns (PAS) onto other complete patterns (MBTI). Because not all MBTI types occur in any given reference group, the search for members of a given reference group can advantageously begin with self-report methodology, but the selection ratio must not be set too restrictively. These observations based on the MBTI seem likely to apply equally to the PSI-Q2 data.

(U) We have sought confirmation of this reasoning in an analysis of the PSI-Q2 data-base analogous to the PAS analysis reported in Table 2. We began this new analysis by identifying ten respondents whose drawings in the *OMNI* experiment had been informally recognized (during routine processing) as outstandingly good examples of what "could" happen; these ten cases were tagged within the larger data base. The question then is, are these ten cases randomly distributed or not. The answer is, probably not; more probably, they represent clusters that are suggested by analysis of the self-reporting questionnaire. Further, based on what we know of the MBTI responses of ERU8, IRU2, and IFU3, it appears likely that the questionnaire cluster analysis is consistent with these findings.

D. (U) Neurolinguistic Programming Investigation (NLP)

(U) We include Dr. Lantz's report on NLP as Appendix B. Although there are many misunderstandings about NLP, it has its roots in sound scientific research. We did not expect that this investigation would yield a new screening technique, but it did provide a sound basis to include it in further research. Specifically, we have added it to our list of recommendations (see below).

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VI SUMMARY AND RECOMMENDATIONS (U)

(U) This project has investigated the possibility of developing personality testing methods capable of discriminating individual persons by their degree of talent for remote viewing. Both self-report and performance-based personality assessment methodologies have been considered. Baseline data have been drawn from a sample of 19 precalibrated viewers and have been applied to new samples comprising 15 viewers and trainees.

(U) The results affirm that important personality differences between viewers and nonviewers can be measured. In addition, the results suggest the need to recognize several relatively distinct "types" of good viewers. It appears that potentially good viewers appear in about five to seven personality categories and collectively represent about 10 percent of the general population.

(U) In our view, we have just begun to recognize the power of these techniques, and recommend that all viewers should be selected, in part, by the procedures outlined in this report. Specifically we recommend

- Extending the RV analysis of the PSI-Q2 data to determine the degree to which the MBTI can be used as an effective prescreening instrument.
- Continuing to collect baseline data as more accomplished remote viewers become known.
- Training a number of individuals to administer the specialized version of the WAIS.
- Selecting all new psychoenergetic participants on the basis of the PAS guidelines.
- Determining if NLP techniques are able to model excellent remote viewing.
- Determining if NLP techniques can be used as an aid in mass or selective screen for RV personnel.

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Appendix A

NAMES OF PAS REFERENCE GROUPS (U)

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Table A-1

(U) PAS REFERENCE GROUPS: TENTATIVE NAMES

Reference Group	Name	Reference Group	Name
ERA0	Psychopathic	ERA5	Conservator
IRA0	Chameleon	IRA5	Investigator
IFA0	Schizoid	IFA5	Physician
EFA0	Vindictive	EFA5	Analyst
EFU0	Gladiator	EFU5	Philosopher
IFU0	Psychotic	IFU5	Acolyte
IRU0	Automaton	IRU5	Programmer
ERU0	Athlete	ERU5	Educator
ERA1	Participant	ERA6	Role-Player
IRA1	Game-Player	IRA6	Technician
IFA1	Martinet	IFA6	Tactician
EFA1	Scorekeeper	EFA6	Auditor
EFU1	Competitor	EFU6	Pastor
IFU1	Opportunist	IFU6	Advocate
IRU1	Team-Member	IRU6	Engineer
ERU1	Rulekeeper	ERU6	Manager
ERA2	Artisan	ERA7	Aide
IRA2	Compliant	IRA7	Pragmatist
IFA2	Narcissist	IFA7	Entrepreneur
EFA2	Hedonist	EFA7	Salesman
EFU2	Interdependent	EFU7	Politico
IFU2	Galatean	IFU7	Egotist
IRU2	Mystic	IRU7	Enthusiast
ERU2	Proprietor	ERU7	Leader
ERA3	Adherent	ERA8	Confrontive
IRA3	Volunteer	IRA8	Cynical
IFA3	Observer	IFA8	Anxious
EFA3	Speculum	EFA8	Defensive
EFU3	Naturalist	EFU8	Compulsive
IFU3	Votary	IFU8	Suspicious
IRU3	Performer	IRU8	Dilettante
ERU3	Showman	ERU8	Seeker
ERA4	Nurturant	ERA9	Psychosomatic
IRA4	Consultant	IRA9	Explosive
IFA4	Counselor	IFA9	Addicted
EFA4	Professional	EFA9	Repressed
EFU4	Coach	EFU9	Depressed
IFU4	Individualist	IFU9	Withdrawn
IRU4	Specialist	IRU9	Obsessive
ERU4	Teacher	ERU9	Stressee

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Appendix B

REPORT ON NEUROLINGUISTIC PROGRAMMING

by Nevin Lantz

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AN INVESTIGATION OF NEUROLINGUISTIC PROGRAMMING AND ITS POSSIBLE APPLICATION TO REMOTE VIEWING TRAINING

Remote viewing training, like any other skill that requires complex mental processes, has been hampered by the inability to perceive directly and thus codify those particular mental strategies necessary for accomplishing the task. Recent studies in the area of nonverbal behavior suggest that mental states can be read from such external behavior as facial expressions [Ekman and Friesen, 1976], eye movements [Galin and Ornstein, 1974], body posture and movement [Spiegel and Mackotka, 1974], and voice qualities [Hernsen et. al., 1973]. Review of the literature in this area led to the question of whether remote viewing training could be enhanced by systematically observing the nonverbal behavior of a viewer and inferring or encoding helpful mental strategies that could be utilized in training this skill. It was hypothesized that elements of the remote viewing process, crucial to performance and training, are not being recognized because of a lack of systematic attention to the viewers nonverbal behavior and too heavy a reliance on self-report for what happens internally as the viewer proceeds with the task. A search was conducted to discover possible systems for observing and encoding nonverbal behavior.

I was attracted to Neurolinguistic Programming (NLP) as a possible tool for increasing the ability to observe and interpret nonverbal behavior. The originators claim NLP as a process for making explicit those mental patterns necessary to perform complex tasks and rely heavily on the observation and explanation of nonverbal behavior to construct their mental maps [Dilts, 1983]. The present study was conceived to address the following: (1) Is there any validity to NLP techniques and if so what are the limitations? (2) Can NLP be used to model excellent remote viewing? (3) Can NLP techniques be used as a screening device for selecting remote viewing trainees? (4) How would one use NLP in remote viewing training? The investigation was conducted by (1) attending the NLP Practitioner Certification program designed by John Grinder and his associates at Grinder, DeLozier & Associates, (2) reviewing the independent NLP publications, and (3) reviewing the literature for research that might validate or invalidate the techniques.

The NLP Practitioner Certification program offered to the public was a 24-day training program consisting of one three-day weekend per month over a seven-month period with certification testing at the end of the sequence. The author attended training from January to

July, 1984, in the Newport Beach area of Southern California and was certified as an NLP practitioner at the end of the program. This report is not intended to make anyone expert in the use of NLP but rather to give enough of an overview so decisions about its applications to remote viewing training can be made.

1. Background

NLP was developed by linguist John Grinder and Gestalt therapist Richard Bandler during the early seventies as a method for mapping the cognitive processes involved in human communication. Their claim is "that if any individual or group displays any sequence of behavior that others find useful, we—employing the tools and techniques of NLP—can "chunk" and "punctuate" that sequence into units that can be practiced and readily learned by any other member of the species [*Dilts et. al.*, 1980]." The method involves systematic observation of verbal and nonverbal communication behavior and mastering new interpretations of these behavioral cues.

Early observations by the founders of NLP were concentrated in the field of psychotherapy studying the methods by which such luminaries as Virginia Satir (family therapist), Fritz Perls (founder of Gestalt therapy) and Milton Erickson (medical hypnotist) produced rapid and apparently lasting changes in intrapersonal and interpersonal behavior [*Harman and O'Neill*, 1981]. These observations led to the development of techniques for encoding and understanding changes in an individual's behavior that have since been applied to a wide variety of human endeavors including business, medicine, law, education, and the military.

Research reports on specific NLP assumptions and observations have not been numerous to date. Although they have written more than a dozen books on NLP, Grinder, Bandler and their associates have yet to publish in professional journals. However, in searching the more general psychological literature it appears that many of their basic assumptions have been independently substantiated. The following section shows the overlap of NLP with cognitive psychology and the recent proliferation of research in nonverbal communication.

2. Basic Assumptions of NLP

One of the fundamental assumptions of NLP is the belief that behavioral responses to the external world are mediated by internal representations or models of previous experience

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(both internal and external). Thus a person does not react directly to the real world but to a mental representation of the world. This places NLP squarely in the tradition of cognitive psychology, which emphasizes the structures and processes within an individual's mind as a major factor in behavior. As *Sampson* [1981] has noted cognitivism is the dominant point of view in current social, personality, and developmental psychology and has a long and distinguished history in psychology.

Another basic postulate of NLP is that there is a connection between observable nonverbal behaviors such as eye movements, gestures, changes in breathing, posture and muscle tonus, skin color, voice tone and tempo and even particular words and the internal neural patterns for processing incoming perceptual data. Thus a trained observer can identify systematic patterns in external behavior and use these data to determine mental processing patterns that individuals use to make sense of and communicate about their experience.

The identification of neural patterns from external behavior depends on two principles of cybernetic systems: (1) Any change in one part will affect all other parts in some way so that when the rules of interaction are understood the effects on different parts can be predicted and (2) activity in one system is a transform of activity in another and, therefore, carries information about the other [Ashby, 1960, 1964]. It follows that all behavior is in some way communication.

The communication aspects of nonverbal behavior have been well researched. Scientific study of nonverbal communication is often dated from Charles Darwin's *The Expression of the Emotions in Man and Animals* [Rosenthal and DePaulo, 1980]. Recent importance of this area is evidenced by the introduction in 1979 of a journal devoted exclusively to research in nonverbal behavior (*Journal of Nonverbal Behavior*). *Mehrabian* [1972] has noted the dominance of nonverbal behavior in his finding that the vast majority of our communication is carried out nonverbally.

Nonverbal communication behavior begins in infancy according to Hubert Montagner who developed a system for predicting future behavioral problems from the gestures of preschool children [Pines, 1984]. Others have identified emotions [Ekman et.al, 1979], states of consciousness [Ekman and Friesen, 1974, Freedman and Hoffman, 1967], intent to deceive [DePaulo and Rosenthal, 1979, Ekman and Friesen, 1974, Kraut, 1978, Zuckerman, Spiegel, DePaulo and Rosenthal, 1982], aggressive intent [Freedman, et.al. 1973, Hernsen et. al., 1973], and attitudes [Mehrabian and Ferris, 1967] using various nonverbal behaviors.

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Davidson [1984] describes some of the brain patterns related to the facial expression of emotion.

Ekman and his colleagues at the University of California Medical School at San Francisco have developed one of the most extensive lexicons of nonverbal behavior outside NLP in their work with facial expressions and hand movements [Ekman and Friesen, 1969, 1972, 1975, 1976]. They offer a 40-hour training program in the use of their techniques for research purposes.

A third NLP assumption is that data are constantly being processed below the threshold of awareness or consciousness and these data can also be responded to unconsciously. Awareness is, therefore, not necessary for learning or transmitting information. *Jaynes* [1976] cites studies supporting this hypothesis, most of which use nonverbal behavior as the method of information transfer. Research in the field of subliminal perception also supports this assumption [Dixon, 1971].

3. Structural Elements of NLP

The unique contribution of NLP theory has been the development of the concept of representational systems. Information about the environment is received through the five senses. Each sensory system is responsible for the transmission and processing of unique sets of distinctions about the individual's immediate universe. Action and movement are initiated via neural interconnections with the motor system. These sensory-motor complexes are called representational systems and are named after the five senses: (1) vision, (2) audition, (3) olfaction, (4) gustation, and (5) kinesthesia. Activity in a representational system is considered behavior regardless of whether it happens internally or externally. Thus making an internal visual image is as much a behavior as walking. All external physiological changes ranging from skin color through breathing rate and eye movements to language are considered behavior.

Accessing cues are the ways by which representational system activity is identified. NLP specifies left-right and vertical eye movements, linguistic predicates, gestures and changes in breathing, muscle tonus, skin color and voice tone and tempo as the behavioral cues to representational system activity. For example, if a person during an ordinary interaction looks upward and breathes shallowly, he is thinking visually according to NLP theory. By observing representational system shifts an observer can identify the strategy used to perform

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a task. For instance if a person looks up and to the left when asked to spell a word, the person is thought to be making a mental picture of the word before spelling it. More complicated strategies can be elicited from sequences of representational system shifts.

4. Application Procedures

NLP techniques have two broad applications: (1) producing behavioral change (therapeutic), and (2) learning completely new behaviors (modeling). The specific techniques for using the information gathered through the observation of representational system activity are numerous and a thorough presentation is beyond the scope of this report. One procedure especially useful in modeling will be mentioned, however. The procedure is known as anchoring in NLP terminology.

The process of anchoring is one of the most important procedures in NLP [Dilts, 1984]. An anchor is simply defined as any representation (internally or externally generated) that triggers another representation or series of representations. The assumption behind anchoring is that because experience is represented as a gestalt of sensory information when any portion of the gestalt is reintroduced the other portions of the experience will be reproduced to some degree. Therefore, any portion of an experience may be used as an anchor to access the total experience. Written words, for instance, are visual anchors for internal representations from the reader's past sensory experience. The visual symbol "mouse" has meaning only in its ability to trigger internal representations based on previous experience.

According to NLP theory anchoring is a naturally occurring process that, if used consciously, can be a major tool in modeling. Anchoring is useful in several ways during modeling. An anchor can be established by the programmer in order to gain access to particular strategies or states which may be useful in accomplishing a specific task. Anchoring can also be used to mark certain parts of a strategy in order to shift the sequence as well as to delete portions of a sequence. A third way of using anchoring is in the installation of new strategies during the learning process.

5. Research on NLP

Research by independent investigators on the NLP notion of representational systems has so far been confined to what has been dubbed the Preferred Representational System (PRS). PRS is the idea that individuals exhibit a preference or dominance of one sensory-motor

system over others and thus limit the richness of experience. One of the ways the NLP practitioner can develop rapport is to determine a client's PRS and then match verbal predicates to that system [Grinder and Bandler, 1975]. Sharpley [1984] reviewed 15 studies investigating PRS and found that less than one third support the PRS concept as well as methods used to discover it. Critical examination of these studies, however, shows a failure on the part of the researchers to specify context (as demanded by NLP practice) and the use of various paper and pencil measures instead of specific behavioral outcomes (as required by NLP).

NLP's own research on representational systems and accessing cues using EEG recordings as the dependent variable has been reported by Dilts [1983]. Though not independently confirmed to date it is an extension of findings reported by other researchers [Galin and Ornstein, 1974; Kocel, 1972].

6. Discussion and Suggestions for Utilization of NLP Techniques

NLP theory represents the compilation of a massive amount of information scattered throughout the fields of linguistics, psychology, psychotherapy and communications. The originators started their observations from a formidable base of scholarship and have developed one of the most powerful and comprehensive communications tools of modern times [Conway and Siegelman, 1983]. Although NLP methods are empirical, there is no question that the theory has a solid base in the experimental literature. As a system it deserves the attention of researchers interested in the processes of learning and information transfer.

Application of NLP technology to the task of modeling excellent remote viewing depends on two things: (1) the availability of consistent remote viewers and (2) the use of highly trained NLP practioners. The need for the former is obvious. The latter requirement is not so obvious because of the ability to acquire some of the more gimmicky techniques quickly without developing the refinements necessary for successful modeling. Certification at the practioner level currently requires close to 200 hours of lecture, demonstration, practice, and evidence of ability to produce certain specified outcomes. NLP modeling seminars are currently offered to those who have achieved practitioner certification. Another alternative would be to hire someone who has achieved the level of master practioner or trainer. There are currently very few people at these levels.

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Use of NLP to develop a screening strategy for finding natural talent in the general population could be accomplished by studying accomplished remote viewers for similarities in processing styles and then seeking out these styles in the population at large.

A logical place to start in using NLP techniques would be to have one or several researchers specifically trained in NLP modeling techniques and have them work with known remote viewers to develop training strategies. Screening can be accomplished by ascertaining the strategy of these viewers and searching the general population for individuals who possess these strategies for similar tasks.

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